

AUG 4 1925

Medical U.S.A.

The Public Health Journal

OFFICIAL ORGAN

Canadian Public Health Association

Vol. XVI

TORONTO, JULY, 1925

No. 7

SPECIAL ARTICLES

HEALTH INSURANCE

DR. J. H. MACDERMOT

MEDICAL EDUCATION

C. F. MARTIN, B.A., M.D.

THE GEOGRAPHICAL ASPECT OF EUGENICS

VAUGHAN CORNISH, D.Sc.

LOCAL HEALTH ADMINISTRATION

JOHN W. S. McCULLOUGH, M.D., D.P.H.

GENERALIZED PUBLIC HEALTH NURSING IN BRITISH COLUMBIA

ISABELLE JEFFARES

CLASSIFICATION OF MEDICAL SCHOOLS

J. C. CONNELL, M.A., M.D.

\$2.00 per annum

40 ELM STREET, TORONTO

20 cents per copy

Summer Diarrhoea

In this condition there is a gastro-intestinal disorder due to the toxins generated from the bacteria in milk.

Many, many physicians throughout the country take no chances in treating their acute milk infections and summer complaints—they immediately prescribe

Nestlé's Milk Food THE SAFE FOOD

For Summer Complaint, Dr. Louis Fischer in his text book, "Diseases of Infancy and Childhood," recommends for a baby under one year of age, the use of NESTLÉ'S MILK

FOOD as follows: Nestlé's Milk Food, 2 teaspoonfuls; water, 8 ounces. Warm in saucepan until it boils, feed 3, 4, or 5 ounces every few hours.



Mail coupon today for your supply of Nestlé's Milk Food. It is sent without charge to any physician.

67

----- PHYSICIAN'S COUPON -----
NESTLÉ'S FOOD CO. OF CANADA LIMITED
84 St. Antoine Street, Montreal

Please send, without charge, one full size package of Nestlé's Milk Food.

Name _____

Street _____

City _____

Prov. _____

KLIM IS UNIFORM MILK

From Which Only the Water Has Been Removed

KLIM is standardized to 3.33% butterfat content when liquid, or 28% when dried. When KLIM is reliquified the butterfat, in fine globular division, remains in perfect emulsion.

A cream line cannot fail frequently to create differences in the fat content of the baby's bottle or the child's ration. In the latter case the cream too often finds its way to the parent's coffee. KLIM eliminates these hazards.

We shall be glad to send you literature and generous samples for any investigations you may wish to make.

CANADIAN MILK PRODUCTS LIMITED
347 ADELAIDE STREET WEST, TORONTO

POWDERED PROTEIN MILK

C.M.P. Brand Powdered Protein Milk is becoming universally recognized as being one of the safest prophylactic foods for young infants. It was originated in conjunction with the Staff of the Hospital for Sick Children, Toronto. We shall be glad to send you samples upon request.



The Public Health Journal

Vol. XVI.

TORONTO, JULY, 1925

No. 7

Health Insurance

BY DR. J. H. MACDERMOT

IN British Columbia we have been conducting a somewhat intensive study of health insurance. By health insurance I mean any plan or scheme whereby a certain group in society, roughly determined by earning power, is insured against the cost of sickness, wholly or in part. A specimen of such a plan is the National Health Insurance of Great Britain, commonly known as the panel system. The history of our connection with the problem is briefly as follows:

Some eight or nine years ago the government of British Columbia appointed a commission to go into the question of workmen's compensation for industrial accidents. Prior to that time industrial companies or other employers of labour insured themselves against accidents to their workmen. When a workman was hurt he usually had to employ a lawyer to fight his claim for damages, or accept a sum which was often unfair. His fight, be it noted, was with the insurance company, not with his employer. He had no wage allowance coming in whilst he was ill, and often he had to wait a long time for his money. The legal fees were high, and very often the final result was that the workman obtained very little.

The attitude of the employer towards an injured workman was hostile. What about the doctor? He usually did his work for little or nothing unless he protected himself very carefully, and on the whole this class of work was exceedingly ill-paid and unsatisfactory to the medical man. In the first bill drafted no mention was made of medical aid at all. When the commission held its sessions the Vancouver Medical Association appointed a committee which met the commission and gave evidence. This committee also approached labour, through its leaders, and urged on them the necessity for a medical aid clause from the point of view of the workman. Together we were successful in having such a clause added.

Next came the question of medical fees and method of administration. At first, there can be no doubt, the commission had at least a

Read before the Conference on Medical Services, December, 1924.

bias towards salaried medical men, from the standpoint of economy, both from money and trouble, as it appeared to them. We were able to persuade them that the principles of free choice of doctor, and payment of the latter, by a schedule of fees were fairer and more satisfactory than the former plan. As a result we obtained our present Workmen's Compensation Act, which works on the whole well and with satisfaction to all those who are party to it. The workman gets all that is his due without deduction; he gets allowances for the time he is away from work, and his bills are paid. The doctor is fairly paid for his work, and except for minor details I think it is correct to say that we have little or no criticism of the Act. The employer's attitude towards the injured workman is entirely changed. He works now with the workman and for him, to secure as good a settlement as can be obtained.

Great strides have been made in the direction of safety appliances, etc., designed to prevent accidents.

This is all a matter of economic efficiency: everybody concerned, the government, the employer of labour and the workman, has realized that the prevention of accidents saves money. They have realized too, that by giving prompt and adequate care to the injured man, they save money and save the human material of industry. The workman is satisfied that he and his family will be able to get three meals a day even when the breadwinner is hurt. It is a sound piece of legislation and is well administered. Our experiences in this regard taught us several lessons, and other provinces will no doubt have seen the same thing.

We learn first as regards the government, that we cannot expect, indeed we have no right to expect, the government to look after our interests. It is true, as we know, that the surest way to secure a good and efficient Act is to have competent medical aid, and this can only be secured from adequately paid medical men. But we must remember that the government is always subject to tremendous pressure from two sides; first, from those who want the legislation which will protect them, and secondly, from those who have to pay for it. The burden of financing these Acts is a heavy one. In the end, we believe, it is lighter than the original burden of cost attached to the old methods; but it is difficult to convince those who have to pay that this is so. Under this dual pressure the government seeks escape and finds it naturally in keeping the medical fees that have to be paid down as low as possible. The moral is that we must fight our own battle. We must be ready and organized to meet any such situation. That is the first and perhaps the greatest lesson we learnt.

Next, we learnt that we must educate our own members. One cannot accuse labour of greed and selfishness, nor can we accuse the government

of meanness any more justly than we can some of our own members. The medical man is willing to be exploited and to do any amount of work for nothing; but when it comes to making an arrangement whereby he can be sure of being paid, he wants the earth; at least, some of them do. This is one point that has to be noted.

Next, as regards Labour. We learnt that Labour is our best ally and we should keep it so. Labour's interests in this matter are ours, and we should realize this fact and work with Labour.

Lastly, we found that this method of dealing with industrial accidents is an extremely good one and very satisfactory in every way to the workman, for the reason that the evils outlined above have been mainly removed, and for us, because we receive fair remuneration for this class of work. Next came the question of sickness. The Vancouver Medical Association took this up next and spent some time deliberating on it. Our trouble was that we had no facts to work on, and the conclusions we drew were hypothetical only and subject to attack for that reason. We felt that something ought to be done but we had not the basic facts at our disposal on which to draw any conclusion. Accordingly we decided to call in outside help and pay for it. Two years ago the British Columbia Medical Association set aside a sum to be devoted to this purpose and employed a statistician to go into the whole matter and dig out the facts of the case. He spent some four months over this task and accumulated a great deal of material which I shall present to you in a brief digest. The following questions present themselves for answer:

1. Is there any demand for health insurance, and from whom?
 2. Is there any need for health insurance? And why is our present system not adequate?
 3. What form should health insurance take? What would be the advantages of it, and the dangers?
 4. What will it cost?
 5. How should this cost be distributed?
 6. How should it be administered?
 - 6a. How will it affect the medical profession?
 7. What attitude should the medical profession take?
 8. How can the interests of the medical profession be safeguarded?
- Questions 1 and 2 may be considered together: 1. Is there any demand for it? and 2. Is there any need for it? Our researches into the economic conditions of British Columbia revealed the following facts: The average income of the industrial worker in British Columbia is \$1,000 a year or a little less. The average duration of illness for each individual is about seven days yearly. The average working man's family in British Columbia has about one week's supply of money in

case of illness attacking the wage earner: when this is spent they must run into debt. Less than five per cent. of the working population has any insurance of any kind against illness, accident or death. This includes lodge or club insurance, or benefit from fraternal organizations, as well as ordinary sickness and accident insurance. Speaking to a statistician of the Sun Life Company yesterday, I was informed that only about four per cent. of the population at large carries life insurance. The cost of insurance is prohibitive to the working man. Sickness means to the working man loss of earning power, absorption of his savings, incurring of medical bills, and hardship to his family. It means more; it means that he cannot get adequate medical attention, and therefore he does not recover as quickly as he should. A working man with pneumonia needs hospital care, trained nursing and skilled medical attention just as much as does a millionaire; but unless he becomes a charity patient how can he afford it? Sickness and poverty react on one another; and worry, insufficient food and so on aggravate the sickness. He does not seek medical attention as early as he should for himself or his family. Much avoidable illness is thereby caused.

Our inquiry covered most of the states of the union, many of which have been studying this question closely. Summarizing their replies we found that they tallied quite closely with ours, their time loss varying from six to nine days yearly. The Metropolitan Life has also conducted an investigation with approximately the same results. In British Columbia the economic loss to industry from sickness, in wages alone, was placed at \$4,165,000. To this must be added medical and hospital care. This has been worked out on various bases, but the smallest estimate is somewhere over \$2,000,000. This when added to the wage loss is rather more than three times the cost of industrial accidents alone. It is the consensus of opinion, we find, that this ratio of three to one is correct, and we will do well to bear it in mind.

Another great disadvantage of our present system is the impossibility of preventing sickness, especially amongst children and women. Except for a small amount accomplished through voluntary subscription and in free clinics, preventive medicine is almost an impossibility, though we admit its necessity and would gladly practise it. Labour, as a section of society, recognizes all these things and is pressing for relief. It is Labour that is hardest hit. They have adopted health insurance as a plank in their platform. The demand is there, and the facts I have cited seem to show that the need exists. I have only dealt briefly with the matter. A very much stronger case could be made out, and it seems to be the uniform opinion of all the states who have gone into the question that under our present system of treatment of the sick there is a great and unnecessary loss of life, of time (that is, wage earning time and

wages) and of health apart from life. It is coming to be recognized that sickness affects a whole community, not merely the sufferer, and that this is true not only of infectious disease but of any sickness. It constitutes a definite loss and in one way or another the whole community pays for it.

Before leaving Vancouver I had an interview with Mr. E. S. H. Winn, Chairman of the Workmen's Compensation Board, who has authorized me to quote him in several references which I may make. He is also chairman of the Mothers' Pension Board. His work in these two capacities has given him an unusual opportunity to observe industrial conditions. I asked him if he felt that there was any need for a system of health insurance and he stated most emphatically that it is one of our greatest needs to-day. The question, "Who should be beneficiaries?" he answered by saying that he would place the upper limit of income at \$3,000 annually. This may appear high to many of you; we had arrived at a somewhat lower figure; but a great many authorities on the subject state that there should be no upper limit. Three thousand dollars annually would include all wage earners, including railway engineers and conductors.

As to the method of administration for such a scheme, it might, I think, be done only in certain ways: 1. By a voluntary organization, somewhat similar to club and contract practice, only on a larger scale and with larger fees. 2. By a compulsory scheme under which every member of the class affected must pay. It may involve only medical aid; or on the other hand sick benefits may be added.

Lastly, as to the payment of medical men and their employment. It may be done by a capitation fee (the panel system) or patients may be given free choice of a physician, who will then be paid according to a fee schedule for the work done. As regards the voluntary scheme, we do not think that anything can be said in its favour. It would not work. The only people the Act was designed to help, the shiftless and improvident ones, would refuse to take advantage of it. The five per cent. who now take out insurance in one form or another would be the only ones who would join. It would cost at least twice as much as a compulsory scheme. During our investigations we found that the insurance companies insuring against sickness return less than fifty per cent. in the form of paid claims. This does not of course mean that they make fifty per cent. profit, but their cost of operation is from twenty-eight to thirty-five per cent. of the premiums. The cost of the Medical Association in British Columbia (that is to say, the cost of administration) is less than four per cent. of the total cost. There are many other objections; and all the states consulted agree that any scheme instituted must be compulsory and must function through an extra political board.

As regards sick benefits, there can be no question that unless these were included the Act would only be partially adequate. If it is true that the average working man's family is only one or two weeks ahead of the wolf, sick benefits are necessary. It was the opinion of Mr. Winn that these might be left out at first and added afterwards, but he expressed himself as being of the opinion that they were an integral part of any complete scheme.

We come now to the question of the method of payment of doctors. We came to a unanimous conclusion, so far as our various committees were concerned, that we should utterly reject the panel system or any system involving salaried medical men except in cases such as X-ray or other laboratory workers. We regard the panel system as pernicious. It introduces the element of speculation into the relations between doctor and patient, which is so demoralizing and leads to such unsatisfactory results in contract and lodge practice, with certain exceptions.

There is a continual struggle between the doctor and the source of his salary, the commission governing the administration of the Act. The competitive element in the practice of medicine, which is so valuable and salutary, is removed when a practising physician is paid a salary. The only room for competition left in such a case is the possession of the job itself. There are other undesirable features of the panel system but they are merely a matter of cost.

The question of cost must come next. The cost, apart from sick benefits, would amount to about three cents a day to the workman himself. For his wife and family it would be increased in proportion but not equally. It is suggested by many who have gone deeply into the subject that there should be no distinction between single and married men but that they should pay equally. The estimates of cost vary to a considerable extent in various localities, but Mr. Winn, who has access to accurate figures in affairs relating to the Workmen's Compensation Act, estimates that the proportion of cost would work out somewhat as follows:

Wage earner \$1.00 monthly.

Government fifty cents monthly.

Employer \$1.00 monthly.

Making a total of \$2.50 in all. This is very nearly our estimate, though we allowed a little more. Three dollars would pretty nearly cover medical aid and sick benefits.

What should be the attitude of the medical profession towards health insurance? In the first place, the medical profession should conduct an organized and thorough investigation into this whole matter. If one talks to twenty medical men about health insurance, one is apt to get twenty different opinions, varying with the status and special

interests of each man, but utterly useless because they do not know the facts. And without a thorough knowledge of these one cannot work out any plan.

May I quote from Dr. Cabot of Boston who wrote about this matter some years ago: "When sickness insurance gets a footing in the country I hope that it will be planned and led by those who know most about it, namely, the physicians themselves. Nothing would be worse for the reputation and dignity of the profession than to become engaged, like the English medical profession, in an unseemly scuffle with the government, to lose in the fight, and finally to be dragged, kicking and struggling into the enemy's camp and forced to do what they had previously angrily refused. Let us make our experiments and gain competence before the state tries to take over so difficult and dangerous a task."

This seems to sum up what our attitude should be, and it sums it up in my opinion fairly well. We should study the problem thoroughly and have every man in the profession acquainted with the facts, and be ready to take a definite stand when the question is mooted, as it certainly will be.

In British Columbia we have prepared a brief summary of the facts as far as we have ascertained them and are sending this to every member of the profession. We contemplate having a round table conference with representatives of labour and getting their views. I would repeat here that medicine has no better friend than labour in this connection. Their interests are ours, and it is just as important for them that any system of medical aid shall be planned along the right lines as it is for us. To this end, I should like to see this matter taken up by the Canadian Medical Association with a central committee and by every province with local committees. I have not dwelt much on the side that concerns us, but is it not true that there is room for improvement in our present system or for a change of some kind?

The really enormous amount of work done for nothing or for trifling fees, the fact that we are handicapped in our work at every turn because our patients simply cannot afford the tests and special examinations that they should have; the huge free clinics in every city, composed of people who could pay a little but who cannot possibly afford regular fees; the impossibility of doing preventive work—all these arise out of our present system of practice. Undoubtedly too, the prevalence of quackery is due to our present system, and nobody can suppose that any intelligent commission administering an Act would allow patients to go to practitioners of cult medicine; this would be not from any love of us, but from simple economic reasons.

Again, we know that certain evils have crept into the practice of

medicine. Over specialization, and specialization by men who are not fit to be called specialists, would be checked, because results are tabulated, and results count. The medical man who lets himself slump, who gets rustier and rustier, could not get by under any system that kept comparative records. The operation of the Workmen's Compensation Act has shown that men are on their mettle, are kept up to the mark, are checked up sharply if they do bad work; and again, cheap contract work and lodge practice would be eliminated.

Lastly, there is considerable economic gain from such a scheme. Certainty of payment, of fair fees for work done, would be a great boon to a profession which has suffered too much from uncertainty in these things. I am not claiming that such an Act would immediately bring about a complete surcease of all our troubles. There are several problems that may arise.

First, the difficulty of preventing some men from getting more than their fair share—and this has been a real problem with the Workmen's Compensation Act. Perhaps limitation of quota might help here. Next, the young man beginning practice: how can we help him?

Then there is the specialist, the legitimate specialist, not the college bred one, who needs elimination rather than help. We must be very careful not to remove incentive and not to try for a standardized product. Our experience of the Workmen's Compensation Act shows that this is not a very serious problem. Besides, there will always be private practice.

Then there is the problem of the indigent. Mr. Winn suggested in this regard that some scheme might be formed whereby people out of work might be carried for three months. Again, what about such matters as venereal disease, and diseases requiring institutional treatment? We must remember that if we adopt any such scheme we must to some extent surrender our independence. We must, therefore, make very sure of our ground before we do endorse any scheme of the kind. We must prepare ourselves before the scheme is put into operation. We must also be prepared at any time in the near future to be called upon to implement some sort of health insurance scheme.

Mr. Winn, whom I have quoted, was two or three years ago appointed chairman of a commission to inquire into health insurance in British Columbia. The report of this commission has not yet been made public, but from conversation with Mr. Winn, I do not think there is any doubt that he personally thinks health insurance should be inaugurated, that it should be administered by an extra political commission, as is workmen's compensation; that patients should have free choice of a physician; that medical and hospital care should be paid for by our present method, that is to say, for work done according to a

schedule of fees; and that all treatment should be provided for. Sanatorium and institutional treatment, he thinks, should be left as they are, under salaried medical officials, and he is most probably right in this.

We in British Columbia do not think that the medical profession should strive to inaugurate any scheme, but that we should educate ourselves thoroughly with regard to all its advantages and disadvantages and remain receptive, but ready to meet any situation that may arise.

The first essential for this is complete organization of the profession. We found this in the Compensation Act matter; our salvation lay in the fact that we were at that time thoroughly organized. Every man in the province was lined up and we spoke as one voice. In England, on the other hand, the profession was caught napping, and we know the result. We have no fear, as far as we are concerned, of a fair and reasonable Health Insurance Act. I am quite sure that many men would welcome it. There are endless details to be worked out, but our clear duty at present is, first to organize; secondly, to study the question; thirdly, to meet those other interests that are involved—labour, the government, and the employer—and obtain their views and impress ours upon them. Our first duty is to the sick. If we can devise, or help to devise any plan which will improve health conditions there is no section of the profession that will hesitate, as soon as the facts of the case are realized.

We owe a duty too, to ourselves, not to allow ourselves to be exploited or to be forced into a humiliating condition of under-payment, of scrambling for positions, of incompetent and skimped work. This is not only for our sakes, but because such a state of affairs is utterly injurious to the very people it is designed to serve. By maintaining our right to adequate payment for honest work we shall be showing our honesty and our sincerity as workmen.

I am presenting herewith the report of our committee brought up to date, showing figures and statistics as regards the financial effect of illness on the working man, and going into the question of costs.

Medical Education

By C. F. MARTIN, B.A., M.D.
Dean, Faculty of Medicine, McGill University

THE extraordinary development of scientific medicine within recent years, as shown by the epoch-making discoveries in methods of diagnosis and treatment, the improvements in technical equipment, and the advance in public health administration, has been one of the cardinal features in the world's progress. Simultaneously, however, it has all enormously increased the complexity of medical education,—so much so that any effort to gain a comprehensive view of its details leaves us in a state of intellectual ataxia.

The attempt to overcome the errors and prejudices attached to older methods of education has not entirely succeeded, and tradition still guides our activities, and, not infrequently, dominates them. The many unsolved problems that face us indicate all too clearly the confusion that still exists as to the real purpose of medical education in our schools. Is it any wonder then, that a year ago the Association of American Medical Colleges deliberated for two long days to bring some kind of order out of chaos? By the time these deliberations ended, little progress had been made, and finally a commission was appointed to investigate the whole field anew and, when ready, to bring before the Association a summary of the most enlightened views obtainable. So great were the divergencies of opinions as to standards that no unity of plan up to that time could be attained.

Far be it from me, then, to offer to-day any solution of the many problems that concern us! Let it be my function merely to present to you a few suggestions as a basis for discussion with the hope that thereby a better mutual understanding may be obtained with reference to the needs of medical education in this vast country.

University and Teacher—I take it that the dual function of a medical school is to *teach* and *investigate*—two very different and yet two very closely related functions. Each teacher of scientific medicine must needs to be an investigator in its broadest sense—while in the atmosphere that he creates about him, the investigator stimulates thought in all those under his influence.

I should like to emphasize at the outset that the university standard of teaching differs essentially from that of the high school. It is not merely the impartation of accepted knowledge, nor the rehearsal of

Read before the Conference on Medical Services in Ottawa, December, 1924.

facts at the bedside, in the theatre or the laboratory. In other words, a university is not there to make of the mind merely an encyclopaedia, but rather to train a working instrument for use in the profession of medicine; not to stuff students with an accumulation of facts, but to teach them how and what to assimilate. Routine instruction there always must be; the presenting of facts, methods, principles—calling for no great skill on the part of the teacher and requiring little effort or intelligence on the part of the student to absorb. Too often this performance seems adequate, and the student is dismissed without a single stimulus to engender a live interest or enthusiastic thrill. But modern scientific teaching has long since outgrown the idea of carrying students through without at the same time developing them. The successful teacher, realizing that it is waste of time to rehearse mere facts (there are text-books for that purpose), inspires his students with higher ideals of service and research, propagates an interest in scientific progress, stimulates new ideas, and surrounds himself wherever he may be with an atmosphere of intellectual achievement; this is an ambition worthy of a university chair, and otherwise the teacher is not fulfilling the qualification for which he is appointed.

The teacher of medicine, then, must be something more than a mere pedagogue. He must be a man with power to infuse enthusiasm and love in the work, a capacity to open up new vistas even in the daily routine.

And, so, the *purpose* of medical education would seem to be primarily to reflect the state of medical knowledge in general; to indicate the method of approach to medical problems; to have the windows wide open to the unknown, and to create an atmosphere of investigation; not research for research's sake, but because every individual patient and every individual malady is a problem in itself for special investigation and individual treatment. It is not a question of how much or how many scientific subjects are in the calendar but what is the quality of the instruction.

The broader the conception of medical education, the better. The more philosophical the training the more the critical faculties develop. Observe the recent tendency to include in the general university curriculum subjects which hitherto have been allotted only to the medical school; hygiene, general pathology, general physiology and even anatomy, and at McGill we have already opened the way.

While it may be granted that a medical school must maintain a high university standard to differentiate it from the methods of the high school, it may be contended that in this new country, the main business of the medical school is chiefly to turn out general practitioners who are able to meet every ordinary everyday emergency with a ready

wit and a skilled hand. Surely this is so—and let no one underestimate the importance of the general practitioner, but obviously this very importance it is, that, to my mind, makes the duty of the medical schools all the more serious. Students must be trained to be not merely *good* ordinary general practitioners, but *better*—men not only with good commonsense and familiar through spoon-feeding with the essentials of theory and practice, but men who, fired with the spirit of enquiry, gain through their training the attitude of the investigator and original thinker. Therein should lie the difference between the practitioner of two decades ago and the excellently trained man of to-day. Will anyone question as to which of these two will make the better and safer practitioner of medicine? Some of you may be aware that a few years ago an effort was made to create a substandard type of physician—one who in two or three years could perchance learn to meet requirements for the rural districts. Was it any wonder that the plan met with failure through lacking, as it did, the fundamentals of sound pedagogic principles!

Time-Table—It is obvious that every curriculum must have its frame-work—an outline as it were of the various paths along which the student must go, to attain power to be of service. There can be no difference of opinion as to the need of a definitely prescribed training, but never should this be so all-absorbing as to destroy initiative or an interested enthusiasm.

On the other hand, there are always more subjects in the curriculum than students can ever hope to master, and the rise of specialism has not lessened the burden. A student can hardly hope to reach more than the threshold, rarely indeed to enter into the outer courtyard of medical knowledge, and even at best, he does not attain a very intimate knowledge of any one of the subjects. There is, in consequence, the urgent need of stressing the major subjects in their essentials only and their general principles, while minor subjects and the specialties may only be so treated as they relate to the general problems of medical practice.

The specialist, unless unusually broad in his conception of education, may not grasp relative values nor distinguish the essentials from the non-essentials in the general plan. Specialism has, verily, gone to the extreme; in dentistry, perhaps, even more so than in medicine. The existence in St. Louis of a specialist on extraction of the unerupted third upper molar tooth may be an extreme example of this!

Standardization, then, is necessary—not a standardization of hours spent in effort to accumulate facts, nor even in the total number of subjects, but a standardization which will furnish evidence of attainment, a proof of the student's ability to approach the many problems of practice, of his initiative and of his ability to convert facts into power.

The time-table must, above all things, not be over-loaded. The amount of information required should be reduced, and the student's capacity to understand principles must be increased. We at McGill reserve two afternoons weekly for the students' leisure; no lectures are given after five o'clock in the afternoon. It is recognized that the curriculum is far too rigid, that there must be more latitude, more flexibility in the time-table, with opportunity to read, observe, think and breathe freely.

Independent judgment and enthusiastic interest grow with exercise and atrophy with disuse, and unless there be some intellectual freedom, there can never be proper mental development.

For the most part, in all our curricula, the time and effort required to accumulate facts is far greater than that afforded for their intelligent contemplation, and for the comprehension of the principles underlying them.

Elimination, then, of unnecessary knowledge is an essential, and it is well to substitute in place thereof free scope for independent work, or a choice of optional subjects along whatever lines the taste may lie.

The month of April in McGill, during which post-graduate courses are now given, has been re-arranged so far as student activities are concerned. The worthier students are allowed free scope to study as they will, and to attach themselves to whatever service or teachers they so desire. Post-graduate courses are open to them, as are also the laboratories and wards for independent observation, and for a leisurely contemplation and summing up of the year's work.

The Pre-clinical Subjects—The marked changes which scientific teaching in anatomy and physiology have undergone at McGill University during recent years form an apt illustration of the need to correlate more closely together not only the preliminary sciences with clinical subjects, but likewise the purely medical subjects studied in the early years of the course. Anatomy has long since ceased to be a study of structure only: to the isolated work of the dissecting-room and lecture theatre has been added the practical study of the living subject. The study of function of anatomical structure has taken the place of mere study of form; the why and wherefore of structure is explained by exhibition in the living body; the normal living individual is exhibited, and when occasion arises, perversions of the normal are presented to the student class in the theatre or in the wards. In other words, the living anatomical subject is made to demonstrate what formerly was only done on the inanimate body in the dissecting-room.

So, too, in our study of physiology. Ward classes form part of the teaching in physiology. The professor of physiology is the director of experimental medicine; he makes rounds with the students in the

wards; he associates himself and his work with the attending physicians. Nay, more, a course is given to clinical teachers on physiology in its application to clinical medicine in order that he may better inculcate physiological principles in clinical teaching.

Thus is brought to pass another great change in medical education. The early contact of the student with patients is more and more stressed, even in the so-called pre-clinical years. In the first clinical year, moreover, students who only recently have been given some instruction in physical examination are now brought into the out-patient departments and wards in groups to learn by direct observation and intimate contact the problems of internal medicine and surgery. In the ward rounds, members of the senior class are called upon to instruct the junior students by discussion of cases under their charge. Correlation of all the preliminary sciences and the pre-clinical subjects is emphasized in the later years, for it is our firm conviction that the methods of the laboratory must ever be closely linked with the clinic.

No more successful course is given in our school than that of the clinical pathological conferences, which stimulate the investigating spirit and a keener search for truth.

Fundamentally, these are the principles upon which medical education should be based, for thereby the student is enabled to gain by experience greater powers of observation, of interpretation, of forming sound conclusions, and of trying them out in the light of his constantly-increasing experience.

The Student—We have dealt with the teacher and the time-table. One word about the student himself.

Next to the inspiring teacher, the student is, after all, the most important asset of the school. The better the type, the greater will be the reputation of the school. A poor type of student tends to lower the standard.

It is for that reason I would like to emphasize here the need of better early school training—better educators—and the misgivings that one feels at the unfulfilled requirements that lead to entrance on a professional career. Fortunately, the popularity of the medical profession permits of a limitation of the number and a selection of the fittest. How often does a candidate mistake his calling! How often does his application form show that he lacks the essential qualities of heart and head and breeding which are so necessary to the making of a physician! Not infrequently, too, the unprepared student may succeed in passing his matriculation, only to find later on that some other calling should have been his choice. Verily, many are called but few chosen, and of the few that are chosen, still fewer attain the goal.

Following upon a good school education, the prospective physician

needs a sound general cultural knowledge, such as is afforded by a year or two in the faculty of arts. With this knowledge should naturally go an elementary acquaintance with the simple technique and principles of the preliminary sciences. Any effort to compel the student to delve too deeply into these sciences, however, during his pre-medical years is often liable to divert his interest from the broader conception of his profession. On the other hand, to those with a taste for such special lines every facility should be afforded.

As in other countries, in other states and provinces, so here—there is a need—a very great need of better and more harmonious co-operation between the universities and the provincial boards. Were it but possible to achieve more success along these lines, Canada would have no need to fear competition from any other country in the world.

To summarize—I would urge for medical education in Canada the following suggestions:

1. Improvement in education in the primary schools, and better trained teachers.
2. A broader cultural training in the pre-medical years, with sufficient teaching of physics, chemistry and biology to illustrate the broad principles of the subjects and the elementary technique.
3. A better standard of English expression and composition.
4. Early contact of the student and patient as illustrated in the teaching of function in anatomy and the teaching of physiology in the wards as well as in the laboratories.
5. Better efforts at correlation of preliminary sciences with the living patient.
6. Still more intimate contact of student and patient in the early clinical years, with special reference to the out-patient department for the study of the beginnings of disease and minor ailments.
7. Emphasis of the three major clinical subjects, and a frank recognition of the fact that the specialties should be taught chiefly in relation to these three subjects.
8. A better programme in the teaching of the specialties as regards quantity and quality.
9. Less overloading of the curriculum and elimination of the non-essentials.
10. Greater intellectual freedom for the student throughout his course and examinations.
11. Insistence on adequate material for clinical work and laboratory facilities in hospitals.
12. More careful selection of medical teachers in respect of their power to stimulate the investigative spirit, while at the same time

exciting sufficient interest by disclosing the utility of the knowledge imparted.

13. Limitation of students, and greater care in their selection.
14. The retention of some didactic teaching, with insistence, however, on the importance of group instruction.

All that has been said in rambling fashion here represents but a few of my own personal beliefs—subject to revision, and, no doubt, very open to criticism. The somewhat chaotic state of medical education to-day lends itself readily to discussion. After all, how few there are with sufficient knowledge and experience to dictate a policy? Let us hope that in our conferences here, our main motive will be an honest effort to aim at raising the Canadian medical profession to higher and ever higher levels of concerted, harmonious co-operation. Divergence of opinion there will be—how, indeed, could it be otherwise, most of all with the problems of medical education.

"Now, who shall arbitrate?
Ten men love what I hate:
Shun what I follow—slight what I receive.
Ten men who in ears and eyes
Match me: we all surmise
They this thing, and I that—whom shall my soul believe."

The Geographical Aspect of Eugenics

By VAUGHAN CORNISH, D.Sc.

THE object of the Eugenics movement, as stated by its originator, the late Mr. Francis Galton, is so to order matters that the most useful part of the community shall contribute more than its proportion to the next generation. My business this evening is to explain briefly the Geographical aspects of Eugenics. The method of the Geographer is to study all mankind in relation to the Regions of the World, and he therefore enquires which Nations are now the most useful part of the Human Community. The answer is not open to reasonable doubt, for, during the last three hundred years, additions to knowledge and increase of efficiency have come almost entirely from the people of Europe and their descendants oversea, the Occidental peoples, who comprise almost the whole of what is known as the White Race.

Latterly the White people, as I shall call the Occidentals, have multiplied much more rapidly than the Coloured peoples, but the latter still outnumber them in the proportion of more than two to one, there being eleven hundred and fifty million Coloured to five hundred million White. According to the best calculation available, no Region will have room for colonists when the population of the world reaches three times its present figure, or a little more, which at the present rate of percentage increase would be in about two centuries, that is to say, in about six generations. As the percentage rate of increase is likely to slow off towards the end, the period may be somewhat longer, but will nevertheless be quite short in comparison with the past centuries of written history. As the proportion of Races is at the end of the colonizing period so it must be expected to remain with little change for a very long time, unless there be much greater differences of survival potency among the principal races than has yet been proved. The next two centuries or so are therefore critical in the racial history of mankind, and an effort to increase, or at the least maintain, the present proportion of White people in the world is not to be regarded as merely excusable, as an attempt at self-preservation on their part, for it is really a eugenic movement tending to the well-being of the world.

When we examine the geography of the White Race we find that there are several Nations in Western Europe, and Nations descending from them oversea, which have shown high efficiency throughout

One of the addresses delivered at a Special Meeting of the Eugenics Education Society of London held in Toronto, August 14th, 1924.

modern times. Of these the most numerous are the people of the American Republic, German Empire, British Empire, French Republic and the Kingdom of Italy.

Union between stocks so nearly akin is free from the extreme risk of chaotic personality which so often results from Colour mixture, but the inherent qualities which will be useful in a particular Country is not merely a biological question, for a Nation is a political community, and so its well-being demands that the political personality of the Nations shall be stable, and not unnecessarily complicated by differences of temperament which cause people to range themselves in opposite camps at times of crisis and excitement. Thus in a Dominion with British institutions and mainly peopled with British stock, it is an essential part of the eugenic movement to promote emigration from Great Britain in preference to that from other countries of equal industrial efficiency, since the British stock is of much greater political use than that of other nations in a country whose institutions have been evolved to suit the British temperament. The maintenance of a fairly homogeneous population is, moreover, especially important in the British oversea Dominions because it is only by similarity of temperament in each and every country of the British Nation that a common policy can be secured throughout the Empire, and without such common policy even Canada and Australia would be to-day not great Dominions in a powerful Confederacy but small Nations occupying countries which lie in positions strategically disadvantageous.

At present the population of Great Britain (for I leave Ireland out of the account) outnumbers that of all the oversea Dominions in the proportion of about two-and-a-half to one, and the excess of births over deaths in Great Britain is very large. Hence the Mother Country is still the chief reservoir of British population for the peopling of the Empire. But the population of Continental Europe together with that of the United States outnumbers the people of Great Britain more than ten times, so that a strong effort to increase the flow of British emigrants to Canada is needed to preserve the predominantly British character of the Dominions, both in the biological and political sense. There are, however, persons in the Home Country who oppose extensive emigration upon what they believe to be eugenic grounds. One argument is that emigration will produce a disgenic effect in the Home Country by drawing away the best of the youth; but this contention is answered by the fact that the conditions in densely and sparsely peopled countries are so different that it is quite practicable to give the Dominions the young people whom they want while retaining those well suited to the needs of the Home Country. It is also contended on the other hand by persons in the Home Country that emigrants from our slums will

deteriorate the stock of the Dominions. Now it is a fact that men have come to Toronto from Great Britain suffering from tubercular trouble acquired in bad town conditions; but I learn from persons of Educational and Medical Authority here that not only has the health of these exceptional emigrants improved, but that their children have grown up in your healthy city entirely free from the disabilities which the parents had acquired in bad urban conditions.

The view that the present extent of unemployment in Great Britain indicates that the population of the country has passed its proper maximum I ascribe to an imperfect realization of the enduring commercial advantages of its geographical position. It is so extraordinarily well placed for serving other countries that the further development of the rest of the world will provide more employment in our Island.

This increase, however, will not keep pace with the present natural increase of the people, so that a large surplus will remain for emigration with the birth-rate as it is now. The progressive fall in the birth-rate during recent years has not much affected the surplus owing to an accompanying diminution of the death-rate, but the margin of the birth-rate which makes increase possible, even under the best hygienic conditions, is becoming narrow, and the time has come when it is imperative in the interest of the British Nation, both in the Home Country and the Dominions, that the younger generation should be told precisely what is the limiting figure. In Great Britain the round number is that, of three children born two reach the marrying age, so that if every woman in the country bore three children the population would be just maintained. But it is not possible for every married woman to bear three children owing to the deaths occurring in the first three years of married life and from other compelling causes. It follows therefore that as soon as the size of the family is universally limited by choice, and not by chance (a condition which is rapidly approaching), it will be necessary for the mere maintenance of present numbers, apart from increase, that those who enter matrimony should do so with the desire and hope of a family of at least *four* children. It cannot be too strongly impressed that the ideal of a family limited to three is inconsistent with that trusteeship of our Race and Nation which is vested in the younger generation now married or about to marry.

Let me point out in conclusion that the resolve to people our own lands with British Stock and to maintain the present proportion of our numbers in the world is essential to the achievement of our highest ethical ideas; for only by maintaining the British as a great and populous people can we ensure that our conception of righteousness shall receive its normal development in our lands, and continue to command the respectful attention of the rest of Mankind.

Local Health Administration

JOHN W. S. McCULLOUGH, M.D., D.P.H.,
Chief Officer of Health, Ontario

M R. NEVILLE CHAMBERLAIN, the Minister of Health of England, speaking of the local administration of public health in that country, refers to the "obsolete, cumbersome, illogical, wasteful and unjust" character of the machinery whereby such work is carried out. The remarks of the minister might, with equal truth, be applied to the system of local health administration in operation in Ontario, and the measures designed for improvement of this work in force in England might, with certain modifications, be employed to advantage by the local governments of the province.

The Ontario system is briefly as follows: Each city, town, village and township has a local board of health and a medical officer of health. There are upwards of 900 of such local health governments in Ontario. In but eight of these, including the principal cities, can there be said to be an efficient health service. In all the others the organization consists chiefly of a part-time medical officer of health, who is a practising physician, with, as a rule, but small remuneration, and subject to the various, well-known disabilities of such a local officer. Little money is provided for public health purposes, and what little is expended is frequently used at the wrong end, in the cure, rather than in the prevention of unsanitary conditions. The public receives little or none of the instruction so necessary to the advancement of sanitary measures.

There are, of course, notable instances where the local health officer, despite the difficulties under which he labours, gives a much better service than might be expected. But as a rule the administration is poor, the funds for public health work scanty, and the personal application of the principles of hygiene neglected. The former chief medical officer of the Local Government Board in England, in speaking upon this subject in reference to England and Wales, says, "The inefficiency of the smaller sanitary authorities has been frequently exposed. There are in England and Wales 1,727 sanitary authorities, not including 82 county boroughs. The total of 1,809 compares with 317 education authorities and 635 boards of guardians. No one has suggested that the efficiency of the work of either educational or relief authorities is lowered by the relatively large areas and population served by them, and every line of evidence points to the opposite conclusion".

In Ontario, in dealing with the subject of local school management, of which there are often as many as a dozen to 20 in a rural municipality, the Premier (as Minister of Education) has struck the keynote in his recommendation that local school areas should, in the interest of efficiency and economy, be combined. *The same principle holds true in respect to local public health administration.* Opportunity should be allowed for the local units of a county to combine for sanitary purposes.

The townships, towns and villages of Ontario annually spend in the aggregate considerable sums of money for this purpose, without much to show for it. The figures for the year 1924 show that there is spent on the salaries of part-time medical officers of health about \$100,000.00, and for public health work in places with a part-time organization about \$200,000.00, or a total of \$300,000.00. For places with full-time health organizations the salaries of the medical officers of health aggregate about \$44,000.00, and for public health work apart from this salary bill the sum of \$1,053, 696.00.

The total for local public health administration, part-time and full-time, in Ontario, reaches the sum of approximately one and one-half millions of dollars (\$1,500,000.00).

Outside the eight cities with satisfactory health administration, there is, with certain exceptions, little value gained for the expenditure of this large sum of money.

Much of this expenditure is wasted, or at least misapplied. There is no concerted effort to control diseases such as cancer, tuberculosis, or the venereal diseases. There is no adequate pre-natal care of mothers, and infant mortality and the incidence of tuberculosis range high. The medical inspection of school children is only beginning, and education of the public in the principles of hygiene, without which no administration can successfully operate to the best advantage, is sadly needed. Government expenditures, for example, in the care of the tuberculous poor is steadily advancing, being higher by \$125,000 for the last year than that for 1923, despite the fact that year by year the government spends increasing amounts in the work of the Department of Health.

To return to the question of how local health administration may be improved. The experience of England, Wales and Scotland, and of the United States, has shown that the small town, village and township health unit is too small to bear the financial burden of a full-time public health organization, and these countries are rather rapidly adopting the plan of *Combining Municipalities* for public health purposes. In Great Britain the unit is called a "combined area". In the United States the county is usually the unit. In Ontario, where many of our counties are large in area, one-half of a county might form the unit, or, where

adjacent counties are small, two or more might be combined. The advantages of such a plan are apparent. The aggregate funds now spent might be utilized in the employment, for the area, of a full-time organization. A notable example of such a combination is to be found at Windsor (Essex Border Municipalities) where, under the direction of an energetic, well-trained medical officer of health, there may be seen one of the most efficient health departments to be found on the continent, and where, a couple of years ago, virulent smallpox, instead of spreading, as it did in other communities, was limited to 67 cases.

Little legislative amendment is needed. Permission might be given to counties to substitute county control for the existing municipal health administration, using the combined resources of the municipalities for this purpose. Instead of an army of 900 or more health officers, we would eventually have perhaps 60. These men would embrace public health work as their daily business, and give to that business the supervision and enthusiasm at present lacking, and which is necessary to the success of any undertaking.

The work of public health depends chiefly on three factors, viz., sufficient funds, competent management, and a receptive public. Health and Thrift, like other qualifications for good citizenship, are virtues which have to be appreciated, striven for and acquired by each individual for himself. But there must first be trained and competent management to lead the way, and the provision of reasonable funds for expenses.
Public Health is purchasable.

Generalized Public Health Nursing in British Columbia

By ISABELLE JEFFARES

Senior Nurse, Duncan Health Centre, British Columbia

FROM the history of nursing it must be realized that Public Health Nursing really commenced with a generalized programme, as all the nursing service of the 19th century was distinctly curative. The first District Nurses went into the homes of the poor and needy, endeavouring to do all they could for the members thereof. With the advance of the profession a general trend towards specialization appears to have entered all branches, more especially perhaps the public health nursing section. Up until the present time a great deal has been said in favour of specialization, and perhaps the majority of nurses doing public health work have specialized along some line. Now, however, it might seem to the casual observer that the pendulum was being swung to the extreme in favour of generalized work.

The great question is, whether the people now or in the future will be better served if public health nurses specialize as doctors do, in certain lines of work. There is a great deal to be said in favour of specialized public health nursing; also, it must be remembered that as yet no generalized programme is perfect, no matter what organization is behind it.

In British Columbia, with the exception of the cities of Vancouver, Victoria and New Westminster, the population is scattered; there are many smaller cities and large towns, with well cultivated surrounding districts; also there are many small towns serving as community centres for large, sparsely populated districts. Aside from the cities the principal means of livelihood are lumbering, mining, fishing, agriculture and horticulture. The vast majority of the citizens being of British birth eliminates to a great extent the difficulty of reaching and training into Canadian home-makers foreigners of many different tongues and varying standards of living. I do not mean that in British Columbia we have no foreign settlers; we have many, including a large percentage of Orientals, and several foreign colonies in the Interior. Still it is not the great problem here it must be in other parts of Canada and in the United States.

Without taking into consideration the cities of British Columbia,

where the work at the present time is chiefly specialized, the different districts can, broadly speaking, be divided into two classes as follows:

A. A town of from eight to fifteen hundred population in which there is a consolidated, or well graded school, a high school, a hospital, several doctors, dentists, churches, government offices, general stores, and the usual varying inhabitants. In other words, a modern town, anxious to fall in line with the other towns of its size in the general advance of civilization. In such a town the nurse should have no difficulty in forming a representative and active Board of Directors, and in getting the earnest co-operation of the citizens. Is specialized or generalized public health nursing indicated in this district?

B. A distinctly rural community, the headquarters of which is a small town or hamlet, dignified with a name as it is on the branch line of a railroad, and near which there is a one- or perhaps two-roomed school, a general store and Post Office. There may also be a doctor in residence, which of course will greatly assist the nurse. This town will be the nurse's centre, and here she will probably reside; but it is the surrounding country she has come to serve, and just what should her policy be, in order that she may render to the people of the district the service they have the right to expect from her?

There are of course many districts and towns of varying size besides the two cited, and yet, in a broad and imaginative way, it is possible to adopt a policy suitable for these districts, and yet practical for all those in between. From work in the field of similar districts I now fully realize and believe that a complete generalized programme is the most desirable, as set forth in the following:

1. The best approach to the family and through them to the community as a whole is made by the nurse who enters the home in time of sickness, in response to a call for help either from the Doctor or from the family itself, and who is known to give bedside care as well as instruction. Also the entrance of several different nurses into one home tends to weaken the influence of each on the members of the family.

2. The important question of finance. The cost of transportation and overhead expense is much less in a generalized service. It is less expensive to maintain one nurse in a small district, who will attend to all branches of the work, rather than a number in a large district specializing in different branches.

3. The constant presence of one nurse in a small district so familiarizes her to the people of the district, that they call on her for advice in health as well as in sickness very readily, and therefore her opportunities for teaching prevention of disease are many.

4. The public when asked to contribute to the support and maintenance of the nurses must be given evidence of value received, and

while it may be possible to point out to many the advantages and value of specialized branches, the great majority feel the need of some tangible result, such as bedside nursing, before contributing.

5. The excellent work done by the nurses in generalized public health nursing in British Columbia is very stimulating, and goes to prove the great possibilities of such work.

Some Observations on Endo's Medium

By NORMAN MACL. HARRIS

IN the endeavour to ascertain the factors of instability in this medium and to correct them, the writer, following in the main the technique set down by the Committee on Standards of the A.P.H.A., tested out four samples of basic fuchsin and seven samples of peptone obtained on the market.

It was ascertained that two main factors governed successful results, and one of lesser importance. It was concluded that: (a) the deletion of meat extract with substitution of K_2HPO_4 in doses of 0.3-0.5 grms. per cent.; and (b) that the use of a basic fuchsin consisting of about equal portions of para-rosanilin and rosanilin were of the greatest importance; and (c) that in the choice of peptone, "Difco" bacteriological peptone assisted materially in giving optimum results.

Formula used by author:

K_2HPO_4	3.5
"Difco" peptone.....	10.0
Agar.....	15.0
Water (distilled).....	1000.0
Lactose, c.p.	10.0

To every 100 c.c. of the above:

Sodium sulphite (anhydrous).....	0.25 (0.125)
Basic fuchsin (para-rosanilin and rosanilin) filtered 10% alcoholic solution.....	0.5 c.c.

Classification of Medical Schools

By J. C. CONNELL, M.A., M.D.
Queen's University

MEDICAL science is cosmopolitan; it has no geographical boundaries, inasmuch as we are concerned only in the extension of the frontiers of knowledge. At the same time, however, I think it is acknowledged that matters relating to medical education fall within the province of each country. In Canada such matters are very often provincial rather than national.

I propose to submit for your consideration a matter which I consider of very great importance and which I think should be carefully considered by this national meeting—a matter which may be regarded not only from a sentimental aspect but, as well, from a practical point of view.

About fourteen or fifteen years ago the American Medical Association appointed a council on medical education, at a time when there were some 200 medical schools in the United States. The primary duty of that council appeared to be to inspect the medical schools of the United States and to report on their condition. Following that inspection, this council on medical education proceeded to inspect the medical schools of Canada and to prepare a report upon them. To those of us who concerned ourselves with these reports, it was from the beginning quite evident that whatever criteria were adopted to determine the standing of the various schools they were not applied in Canada in just the same way as they were in the United States. As a result of these inspections there have been published from time to time, in the annual reports of the council on medical education, a classification of the American medical schools, together with one in regard to the schools in Canada.

I shall not go into any detail except to say that as a result of the last inspection of which I had any knowledge, which was made in 1921, a report was submitted by the inspectors which, as it related to one of our Canadian universities particularly, was so untrue in many respects, and so absolutely unfair in many more, that the senate of the university and the board of trustees took the matter up of its own accord and entered a vigorous protest against the action of the inspectors of the council. Following upon that protest, whether in consequence of it or not—that classification of Canadian schools was discontinued. For the

Read before the Conference on Medical Services in Ottawa, December, 1924.

years 1921, 1922 and 1923, in the reports of the council on medical education no classification of Canadian schools was included. In the report of the council published in the *American Medical Journal* in August of this year there appears again a classification of Canadian medical schools, and apparently, at least so far as I know, that classification has been made without any re-inspection. Certainly there was no general re-inspection.

Now, let me point out just what this means. First of all, I want to show that in the United States there are now about eighty medical schools, of which only four are placed in Class B by this report. So far as Canada is concerned five schools are placed in Class B, namely, Dalhousie, Queen's, the Western University, Montreal and Laval. On the other hand, I would point out that the report includes in Class A in the United States such institutions as the College of Medical Evangelists, Loyola school, Chicago; Boston University, Boston, and others of a similar standing. I know something of these institutions, and it is quite evident that the criteria are not applied in the same way to Canadian schools as to those in the United States.

There is another point to which I would call attention, and that is that the judgment of this council on medical education is not universally accepted in its own domain. The State of New York does not accept its judgment in regard to Canadian schools, nor even in regard to the schools of the United States. One of the American schools included in Class A in this report is not accepted in that category by the Board of Regents of the State of New York, who have made their own classification of Canadian schools. And the classification made by that body in regard to Canadian schools is different from that which appears in the report of the council. The State of Pennsylvania has also made its own inspection with a different result. So that obviously the judgment of the Council on Medical Education is not to be accepted as finally authoritative.

Now, there are two aspects to this question: There is the sentimental side of it, and there is also the practical point of view to be considered. It is a humiliation that those connected with certain Canadian schools should find themselves in the company indicated in this report. When, however, a foreign corporation undertakes to classify Canadian schools without invitation, although they may consider their results confidential, without exception being taken to them, the matter assumes a different aspect when those results are published throughout the world. I think it is rather a serious matter, as it puts a grave disability on every Canadian graduate from every one of these so-called Class B schools who may happen to be in practice anywhere in the United States. Such a man has not the same standing if he is called into court; it is pointed

out before his evidence is taken that he is a graduate of a Class B school, and this prejudices him immediately in the eyes of the court. That is the practical side of the matter.

Now, it seems to me that it would be very proper for this Conference to take some action in the matter. In my judgment there never was a medical school in Canada which was justly included among the Class B schools of the United States. There never was a school in Canada that gave a degree with less than four years' work. I am unwilling to take the point of view that medical education in Canada has benefited in any way by the inspections of this particular council. I move therefore that the matter of the classification of Canadian medical schools by the Council on Medical Education of the American Medical Association be referred to the Resolutions Committee in order that a suitable resolution be drafted for the consideration of the Conference.

Medical Education

By J. J. R. MACLEOD, M.B., Ch.B., D.Ph., F.R.S.
Toronto

MR. CHAIRMAN and Gentlemen, it is obviously impossible in twenty minutes to consider in any adequate detail the fundamental principles involved in an education for the medical practitioner.

The fundamental principles which must guide us in framing a course of study for medicine are, first, to train the student to grasp the known laws of science so that they may be applied in the detection, prevention and treatment of disease, and secondly, to give him sufficient practice so that he may apply such facts and procedures as experience has shown are the most efficacious for these purposes.

It is essential that these principles be lived up to, and yet it is impossible that the method of working them out can be the same in different places. I cannot attempt to give any review of the methods in vogue in different medical communities, but must confine my remarks pretty strictly to the type of medical education which I believe most adequately fits the youth in a Canadian community for the practice of his profession.

There are several aspects of the problem which demand attention, and the first is with regard to entrance requirements. There are two purposes for these requirements: The first is that the student may have a suitable general education, so that his mind may be prepared and trained to assimilate new knowledge; and, secondly, he must have had some preparation for the study of medicine, *i.e.*, some preparation in the fundamental sciences upon which the practice of medicine and surgery depend.

Now with regard to general education, this must necessarily vary greatly in different communities. The ideals of these communities vary; the facilities for education vary; the traditions vary. It is, I think, an accepted principle that you cannot have exactly the same educational system in different countries, even although these may be very closely related. In most countries of the English-speaking world there are two examinations which are given to test the efficiency of school education. These are generally the junior and senior leaving certificates. They go by various names in different countries. Sometimes they are called leaving certificates, as in the Scotch education

Read before the Conference on Medical Services in Ottawa, December, 1924.

department; sometimes they are called the certificates of an examination board, as of Oxford and Cambridge; sometimes they are matriculation certificates, as in London; sometimes they are called graduation certificates, as in the United States. In most places in Canada they are known as matriculation certificates of the junior and honour or senior standard. It is a very difficult thing to equate the standards demanded by these two certificates, almost impossible to do so exactly. I have compared as closely as I can the two with which I am most familiar, the entrance requirements for the Scotch universities and for the Canadian universities, and as a result of the investigation which I made with the aid of registrars and other experts in education, I find that there is as close a similarity as there could possibly be between the junior leaving certificate of Scotland and the junior matriculation of Ontario; and the senior certificates, although I am not quite so sure of these, very nearly correspond also. It comes to be important then in equating the value of preliminary education to have some simpler method by which this can be done, and in my belief there is probably no better method than to take the average age of graduation.

Granted that the educational system of a country is sound, and is based on firmly understood pedagogical principles, then I think we can take the age on graduation from the high school or similar institution as a fair standard of the attainment reached. I have taken the ages of entry to the University of Toronto Medical Department, and have tabulated them for each of the years, with very interesting results. There are 780 students concerned, and it is a six years' course. The largest number of students entered at the age of nineteen; the next largest number at eighteen, and the next at twenty. The peak is at nineteen; that is, for all the students. Three years ago we raised the entrance requirements to the medical faculty of the University of Toronto in a manner which I will explain in a moment, so that it is interesting to compare these figures for the total six years with the figures for the next three years during which the new entrance requirements have their effect. There the results work out pretty nearly the same. Thirty-one per cent. of the students of the first three years entered at nineteen; 26.5 per cent. at eighteen, and 14 per cent. at twenty, which means that in the three years during which the standard has been raised for the school, the school authorities have so adjusted their schedules as to make it possible for the youth even in face of these increased entrance requirements to get through his school education in a somewhat shorter period of time than previously obtained. Two-thirds of all the students in the first three years in the University of Toronto entered at or below nineteen years of age, which means that graduation on completion of a six years' course brings the age of the

student between twenty-three and twenty-five, and I think it will be admitted by most medical educators that these are about the ages at which a student should be graduated from his medical college.

Now with regard to the junior certificates. Junior certificates include English, Latin, mathematics, history, physical science, and usually another language. Some other subjects are usually added, but the student has a certain option with regard to the choice. These junior certificates are all pretty well established, as it were, except with regard to the sciences. The sciences which can be most advantageously taught in schools to these students are mathematics, physics and chemistry, and it is extremely important in the high school training in these subjects that the heuristic method should be adopted and encouraged as much as possible; that is the method by which the student is taught to think out experiments for himself. He is given the problem, and simple apparatus—it need be only very simple, a piece of string and a weight will do a great deal, a piece of tubing will do a great deal—and he is made to work out experiments for himself. And similarly in chemistry; the apparatus need not be elaborate. Teaching by the heuristic method is probably more valuable in physics and chemistry than in biology.

With regard to the honour certificate, as a rule the requirements are about, I think, equivalent to the high school certificate in the schools of the United States, that is, a graduating certificate from a high school in the United States. As a rule this is considered a fair education, and the youth obtaining this certificate is considered to be suitably trained to enter most of the professions. In the United States and also in Great Britain it has been considered that for the medical profession there ought to be further training; it has been considered there should be a further cultural training. In Scotland it has recently been enacted that besides this junior certificate there shall also be required a senior certificate in three subjects at least, and in the University of Toronto we have adopted the same principle. We require one further year at high school or collegiate institute, and we require that the subjects taken in this extra year shall be English, mathematics and one language. It is agreed by most educators, I think, that this extra year at high school or collegiate institute is equal to the first year in the arts course in most colleges, and by requiring an honour certificate you are really requiring one year of college education besides ordinary high school education.

We have chosen English as one of the obligatory subjects for obvious reasons I need not take time to cite. We have chosen mathematics for reasons which it may be well to point out. In preparing the student for the profession of medicine, we have to remember that the practice of medicine depends upon the application of the laws of physics and

chemistry, in the study of animal function and in the investigation of disease. Therefore a man must be trained to think in these fundamental sciences. The schools, we believe, cannot carry the training further than the junior certificate in physics and chemistry. Some schools can, no doubt, but most schools cannot. All schools, however, are capable of giving an adequate training in a science upon which these sciences depend, mathematics. There is no high school or collegiate institute in which an adequate training in honours mathematics cannot be given; please remember it is not that the man may acquire the technique of mathematics that this training is required, but rather that the man may be trained to think scientifically, and no training for this purpose is better than a course of mathematics.

There are many other aspects of the entrance requirements that I should like to dwell on as I consider them a very important part of education, but time will not permit. I hasten on to the curriculum.

The first year of the curriculum in most places is known as a pre-medical year. It is a training in physics, biology and chemistry. It is obviously the foundation of medical knowledge, and unless this foundation be well built the superstructure cannot be adequately added. The main thing in the course in these subjects is the training in principles. Facts are not important. Facts in physics are not important to medical men: the principles are. The mind must be trained so that in after years, when it is necessary to do so, the physician or surgeon may be able to grasp the significance of new principles in these sciences and apply them in the treatment of disease. I need cite only as an instance the application of X-rays, the application of heat rays, the very remarkable application of even the fundamental principle of hydrodynamics in the measurement of blood pressure. Very dreadful mistakes were made by the profession in earlier years because so few comprehended the principle of hydrodynamics. It is not facts, it is principles that should talk, and that is why a grounding in these subjects, the fundamental medical sciences, is necessary.

The fundamental medical sciences I would subdivide into anatomy and the institutes of medicine. Of anatomy I need say very little, only perhaps it is well to emphasize that in its modern aspects this subject should include the study of X-ray plates and their interpretation, and some surface anatomy. Repetition is most important in the teaching of anatomy. Anatomy is a science based on absorption. It is a science demanding a very retentive memory, and it is only possible to learn this science on the principle of summation of stimuli—repeat, repeat, repeat, until the subject sinks in and becomes part of the automatic mental mechanism, as it were.

With regard to the institutes of medicine, it comprehends the sciences

of physiology, bio-chemistry, bacteriology, pharmacology and pathology. It is really the science in which the pre-medical sciences are brought together, and their application in the study of animal function, and therefore in the interpretation of disease, worked out. It is the junction point in medical education. The whole of medical education depends upon a further study in these sciences.

I will speak of physiology, and of that only for a moment. The training in physiology, like the training in physics, should be based on the principle that it is not facts so much that you wish to convey to the student's mind, but principles, and in this training therefore the laboratory must play an essential role. In the laboratory the student creates by experimental method conditions which are strictly analogous with those which are met with in the clinic, where, however, they are created by disease. If, therefore, you train the student properly in the physiological laboratory to interpret the changes in function, and investigate the changes of function which result from these experimental lesions, you are necessarily training him also in the symptoms of disease; and I think there is no part of the course in physiology that is more important for this purpose than the course that is often called the 'frog and turtle' course, where the student is made to go through experiments of an apparently trivial nature on isolated muscles and isolated heart. Now, gentlemen, I know that the value of this course is often put at far too low a level, and that is because, I think, most people do not understand its object. The purpose of this course is to train the man first of all to formulate a problem; secondly, to simplify it to within his limits of investigation; thirdly, to test this problem by the physical and chemical means that are available; and fourthly, to draw conclusions and test those conclusions so that he may know whether the hypothesis with which he started can be sustained or dismissed. Diagnosis is the formulation of a hypothesis which is then put to the test of observation or experiment. It is exactly the same in the physiological problem; and to train a man properly in this method, begin with the simplest conceivable experiment. These are afforded in the so-called frog and turtle experimental course. I, for one, as a teacher of physiology would never give up this course; I consider it the most important part of the whole training. From the simple, the student proceeds to the more complex. He goes on to experiment on mammals, and then finally ends up with experiments on man; and in the course given in most physiological laboratories now, from one-third to one-half of all experiments are on man himself. That has developed very much in recent years. I cannot say more about the other courses as time will not permit. There are six here.

I wish to say one word with regard to options. Besides the obligatory

courses in the medical curriculum a certain amount of time should be given for options. These options may be either in cultural subjects or in scientific subjects. In cultural subjects they should be given with the point in view that the student may carry forward the training he has had in high school on through his whole medical curriculum. It does seem a pity that a student who has had a course of four years in high school in French, should, on going to the medical faculty, drop the whole thing so that he forgets it. It seems to me it is obligatory on all medical educational organizations to afford the student a chance, during his medical course, to apply that knowledge in French, so that he may use it profitably in his profession. It is easy to do it; it works out; it has worked out in the University of Toronto. Finally let me read to you the number of students who have elected to take the various options that we have offered. The details as to the working out of these you will find in the University Calendar; I need not take time to explain them here. In the first year the students elected options as follows:

Scientific French.....	54
Scientific German.....	3
English.....	27
Mathematics.....	1
Exempt.....	1

In second year there are two groups of options, one group cultural and the other scientific, and every student must take one subject from each group. In the cultural options students took courses as follows:

French.....	18
English.....	5
Psychology Lectures.....	72
Mathematics.....	2
History.....	2
Exempt.....	1

You will notice that eighteen students took French again in their second year. They are keeping up the study and can possibly now use French in a practical way. We know how important a knowledge of French is in Canada, and here a chance is given to the medical student of keeping up what he has learned, and carrying forward his studies in the language. An excellent course of psychology lectures is given in the cultural options; preparing the medical man for the study of the psychological aspects of disease; not that they may become psychiatrists, but may be able to apply the principles of psychology in the practice of their profession. I will now give the number of students taking scientific options in the second and third years.

SECOND YEAR

Scientific Options

Chemistry.....	48
Biology.....	45
Physics.....	3

THIRD YEAR

Scientific Options

Cytology.....	12
Com. Neurology.....	6
Parasitology.....	6
Embryology.....	7
Anatomy Joints.....	40
Anatomy Cross-Sections.....	19
Mathematics.....	3
Physics.....	3

You will notice that the student is given the chance in the second year to repeat some of the things in chemistry he learned in the first year. Why drop it? Let the subject spread over the years, and do that partly by means of options. The psychology lectures, and the cultural options in the second year, only take four hours a week, and yet that is enough to give a man a certain experience in that science. In the option of cytology the student is taught the principles of microscopic technique more adequately than he could be in a big class. He is made to prepare scores for himself from the beginning and study them. I will not in the moments that remain give the numbers for the fourth and fifth years, but I will take a moment simply to read, if I may, from an article that appeared in the *University of Toronto Monthly* some years ago, which I think sums up the principles upon which the medical schedule should depend:

"These principles have been stated in what I believe to be the order of their importance. For if the mind be properly trained, the acquisition of knowledge will unconsciously follow, and the graduate will enter upon his professional career prepared not merely to apply the already established practice of others, but as a critical thinker and investigator. Every graduate in medicine, whatever his particular sphere of activity, should be an original investigator. If he is engaged in general practice, he must consider every one of his patients as furnishing a separate problem, to be investigated by the application of scientific methods, reinforced by a knowledge of the experiences recorded by others. If he is engaged in any of the other branches of medical science, originality in thought is equally essential to success."

And with regard to raising the entrance requirements to the extent to which they have been raised, and that is not very far, let me add that this standard which we require now is practically the same as that required for most students of engineering. The student of engineering has to deal

"With measurable factors, with calculable forces, and with known magnitudes of error. But the physician must deal with a much more complicated type of problem; one which embraces elements of vastly differing categories, chemical, physical, biological and psychological. Surely to do this properly the medical student, before he enters upon his more strictly professional studies, must be at least as highly trained in the sciences as the technical student. And he should besides have a broader education in the humanities, for his science must be tempered by a sympathetic understanding of human nature if he is to apply it successfully in the relief of suffering."

Monthly Jottings of The Sanitary Inspectors' Association of Canada

The Annual Convention of the Association will be held in Winnipeg, August 19th-20th-21st.

The Convention will open at 9.30 a.m. on Wednesday, 19th, in the Parliament Buildings, Winnipeg.

We hope to have the proceedings opened by Sir James Aikins, K.B., Lieutenant-Governor of Manitoba.

It is also expected that the Minister of Health and the Mayor of Winnipeg will attend the opening session to welcome the delegates.

An excellent programme of addresses, papers, visits of inspection, and entertainment, is nearing completion.

This is an excellent opportunity for the East to meet the West at the Half-Way House, Winnipeg.

Every member should make an effort to get to this Convention.

Health Officers and Provincial authorities are being asked to send some of their men to this important gathering.

We have advance advice from several prominent Eastern members that they will be there.

Don't wait for personal invitation. Just note the dates and make your plans to come.

We had a visit yesterday from Mr. Alex. White, Chief Sanitary Inspector for the Province of Ontario. Mr. White will attend the Convention, and will also give an address.

Mr. Millar, of Fort William, also in the Ontario Provincial Health Service, was along with Brother White, and he also will give us a talk at the Convention.

We have not yet heard from the West. Members in Regina, Saskatoon, Calgary, and Edmonton, should let us know as soon as possible how many we may expect from these and other Western points.

The Provincial Board of Health is supporting our Association in this Convention.

Owing to the comparatively small size of the gathering no concessions can be got from the railway companies, so that ordinary fares must be paid.

The Royal Sanitary Institute (Manitoba Examining Branch) held an examination here in May, at which seven Public Health Nurses and one male candidate sat, all of whom were successful in obtaining the Sanitary Inspector's Certificate.

As you probably know, this Certificate was formerly known as the Nuisance Inspector's Certificate, and is the same as that possessed by most of our members.

These successful candidates are making application to join our Association, and will probably be elected in time to attend our Annual meeting.

Past President W. F. Thornley, Chief Sanitary Inspector of Hamilton, Ont., will be with us.

These facts taken together, seem to forecast one of the most successful Annual Conventions that the Association has yet had.

The Convention will be our twelfth. Help to make it the best yet by attending yourself.

There are already several invitations on file to hold the 1926 Convention in various widely scattered places.

A number of the members have taken to heart the jotting in last issue and written to the Secretary, and as he has just returned from holiday, a batch of letters are to be answered.

The Executive Council has put in a full year endeavouring to keep the wheels of the machinery in running order. They will probably place some matters of importance before the Annual Meeting, and for this reason it is hoped that there will be a large attendance.

Will the members who cannot be with us at the Convention please drop a line to the Secretary, especially if they have any suggestions to offer.



The Provincial Board of Health of Ontario

COMMUNICABLE DISEASES REPORTED FOR THE
PROVINCE FOR THE WEEKS ENDING JUNE 6th,
13th, 20th, 27th, 1925

COMPARATIVE TABLE

Diseases	1925		1924	
	Cases	Deaths	Cases	Deaths
Cerebro-Spinal Meningitis..	5	2	9	5
Chancroid.....	1	..	3	..
Chicken Pox.....	457	1	265	..
Diphtheria.....	142	12	227	12
Encephalitis Lethargica.....	..	4	1	1
Gonorrhoea.....	132	..	132	..
Influenza.....	10	7	9	6
German Measles.....	23	..	150	..
Measles.....	1063	2	4321	12
Mumps.....	300	..	729	..
Poliomyelitis.....
Pneumonia.....	..	126	..	149
Scarlet Fever.....	326	1	510	14
Septic Sore Throat.....	1
Small Pox.....	12	1	24	..
Syphilis.....	48	..	96	..
Tuberculosis.....	165	85	162	89
Typhoid.....	46	3	47	1
Whooping Cough.....	269	7	104	3
Goitre.....	16	1	1	1

The following places reported cases of Small Pox: Kingston 6, Welland 1, Merritton 1, Ottawa 1, Peel Tp. 1, St. Catharines 1, London 1 death.

News Notes

VICTORIAN ORDER REPRESENTED AT INTERNATIONAL COUNCIL OF NURSES.—Miss Elizabeth L. Smellie, chief superintendent of the Victorian Order of Nurses for Canada, accompanied by Miss Margaret Moag, district superintendent, Montreal Branch, and Miss Edith Campbell, district superintendent, Toronto Branch, sailed from Montreal the sixth of June on the SS. Ascania for England. They will be joined later by two other Victorian Order nurses, Miss E. Sargeant, of Cornwall, and Miss L. Gray, of Renfrew, when all will attend the Congress of the International Council of Nurses to be held at Helsingfors, Finland, July 20th-25th.

Miss Smellie is the official representative of the Victorian Order of Nurses for Canada to the Congress and will there conduct a round table conference on "The Nurse in Community Health Work," and will also open the discussion of the paper "Types of Organization in Public Health Nursing," to be given by Miss Elizabeth Fox, national director of the American Red Cross Public Health Service.

An exhibit illustrating the various types of activities of the Victorian Order throughout Canada has been sent to Helsingfors and will form a part of the Canadian nursing exhibit.

Dr. Forest Leader, of Victoria, B.C., was recently chosen by the Canadian Medical Council as president-elect of the association for the term 1926-27. He will assume office at the 57th annual convention to be held in Victoria next year.

Dr. A. Primrose, of Toronto, was elected as the new chairman of the council, while Dr. A. T. Bazin, Montreal, was returned to the office of treasurer, Dr. T. C. Routley, also of Toronto, continues as general secretary of the association.

A grant of \$30,000 to carry on post-graduate extension lecture courses throughout the length and breadth of Canada from the Sun Life Assurance Company, of Canada was accepted.

According to the provisions of the grant the association will control and manage the details of the organization and the development of the service, which will be chiefly directed toward helping the rural medical man to keep abreast of the advance in medicine.

The Federal Department of Health, several years ago, succeeded in getting a sum of money set aside for the assistance of the Provinces,

which would undertake certain Anti-Venereal Disease measures. This Province was one which accepted the conditions, and adopted the control programme made possible through the monetary assistance thus secured.

The money so received is expended in the maintenance of Clinics, in paying for the treatment of patients by physicians, or in hospitals, and in providing for a more complete Laboratory service, especially free Wassermann tests and free examination of other specimens.

Much difficulty has been experienced in securing the continuation of the Federal Grant, one objection being that the medical profession of the Dominion has not responded to the requests made on it, by giving to the Health Departments information from which it may be determined if the expenditure of the money has had any results in diminishing the prevalence of the diseases.

The arrangement under which any physician can procure, at any time, a report on blood or other specimens sent for examination, would appear to offset any expense to which he is put by reporting the cases of Venereal Diseases seen by him in his practice. All that is requested in the report is the mere fact that a case of Venereal Disease has been met with.

The name of the patient is not given. Professional confidence is not violated, nor the relationship between the patient and the physician in any way altered. Forms and envelopes are provided free of cost.

The Department needs the co-operation and assistance of the members of the profession; and this, if secured, may work out to the further advantage of both.

With the Vital Statistics for the month of March, issued with these "Notes", the first six months of the fiscal year 1924-25 is completed. A comparison with a corresponding period of the year 1923-24 is possible.

The total deaths during the later period numbered 3,323, against 3,042 of the former half year. The births are fewer, 5,612, against 5,642 of 1923-24. Infant deaths numbered only 493, however, against 515 of the former period, so that the infant death-rate shows a reduction, being but 87.4.

In connection with the infections, especially Tuberculosis of all forms, it is to be noted that there have been 33 less deaths in the later period, 308 against 341. A reduction of 10% in these deaths is gratifying, especially in view of the fact that during the past three years there has been little evidence of improvement in the rates. If this lesser rate of loss persists throughout the year, the Province will have, for the first time in its history, a pulmonary tuberculosis death-rate of less than 100 per 100,000. All the improvement, however, is in respect of the pulmonary

form of the disease. The number of deaths from other forms of tuberculosis is practically the same in both periods, 56 against 55.

The diseases from which the Province has lost more of its population are:—Pneumonia, Influenza, and Typhoid Fever. We have lost fewer of our population from Diphtheria, Measles, Whooping Cough and Scarlet Fever. There were reported, however, 650 cases of Scarlet Fever during the later period, against 144 during the former.

The total number of cases of disease reported was 3,929, against 3,135 of the former period. It is hoped that the increase is due to the fact that more practitioners are reporting their cases, though undoubtedly there has been more sickness. It has been estimated that there are 100 attacks of sickness to each annual death, and since in the period there have been 300 more deaths, more sickness, though not necessarily notifiable sickness, must have been experienced.

On Monday, July 21st, Montreal's City Council adopted the milk by-law which has been under consideration for some time.

The by-law, as presented, provided that all milk be pasteurized, excepting what was defined as "special milk", which corresponds with what is usually described as "certified milk".

Before adoption, the by-law was amended so that all milk, whether pasteurized or special, must come from cows that have successfully passed the tuberculin test.

Montreal is to be congratulated upon its action in taking the necessary legal steps to secure a pure, safe milk supply, and the Health Department can be trusted to guarantee the enforcement of the by-law. It is anticipated that Montreal will continue its forward movement to attain its proper place in regard to health conditions.

According to the Boston department of health, Public Occurrences, Sept. 25, 1690, published the following comment: "The smallpox which has been raging in Boston after a manner very extraordinary is now very much abated. It is thought that far more have been sick of it than were visited with it, when it raged so much twelve years ago. Nevertheless it has not been so mortal, the number of them that have dyed in Boston by this last visitation is about three hundred and twenty, which is not perhaps half so many as fell by the former."

"It infected some children of mothers that had themselves undergone the disease many years ago, for some such were now born full of the Distemper. It is not easy to relate the trouble and sorrow that poor Boston has felt by this Epidemical Contagion."

(From the *Journal of the American Medical Association*, July 11, 1925.)

Annual Meetings of Medical Societies in Nova Scotia

THE annual meetings of the Association of Medical Health Officers, and of the Nova Scotia Medical Society, took place at Bridgewater, June 30th and July 1st and 2nd. In accordance with the custom usually followed, the Medical Officers' meetings preceded that of the Nova Scotia Medical Society.

ASSOCIATION OF MEDICAL HEALTH OFFICERS

The Chair was taken, at this, the eleventh annual meeting of the Association, by the First Vice-President, Dr. E. D. MacLean, of Truro, in the absence of the President of the Association, Dr. Dan. MacDonald, of North Sydney. A fair attendance was present, consisting of the Medical Health Officers, members of the Provincial Department of the Public Health, and some visitors.

The morning session was largely taken up by routine business, the appointment of committees and general discussions, especially concerning measures likely to produce more satisfactory and complete reporting of Notifiable Diseases.

The first portion of the afternoon session was given over to the election of officers for the ensuing year and suitable action on Resolutions submitted for consideration of the Association. The following Medical Health Officers were elected as members of the Association for the incoming year :—

President—Dr. E. D. MacLean, Truro.

First Vice-President—Dr. R. L. Blackadar, Port Maitland.

Second Vice-President—Dr. A. S. Kendall, Sydney.

Secretary-Treasurer—Dr. A. C. Jost, Halifax.

Council—Dr. F. E. Rice, Sandy Cove; Dr. R. L. Blackadar, Port Maitland; Dr. M. T. Sullivan, Glace Bay.

Among the Resolutions submitted was a Resolution of regret on the death of Dr. L. T. W. Penney, of New Germany, the Medical Health Officer of the County of Lunenburg, who had been, for a number of years, a member of the Association, and whose death, but a few days before the meeting of the Association of which he was the Second Vice-President, removed from among their number one who had always shown a marked interest in the improvement of the health conditions of his district.

The professional portion of the programme was given over to the consideration of a number of phases of public health work. The advances in Scarlet Fever Control, the consideration of the technique of smallpox vaccination and the reaction of immunity, the effect of liver extract in the reduction of high blood pressure, and the possibility of a lead poisoning resulting from lead mixtures used as an addition to gasoline in motor engines were among the items considered by Dr. H. A. Chisholm.

Dr. P. S. Campbell referred briefly to the tuberculosis work being carried on in the Province, giving especial attention to the work in the County Clinics visited by him. The attendance at these Clinics has been well maintained, and throughout the Province the profession has supported, in an extremely gratifying manner, the efforts being put forth to assist them in the diagnosis of tuberculosis cases in the incipient stage of the disease. Dr. Campbell's paper dealt mainly with the Paul Test for Smallpox, citing a number of instances in which, during the past year, this or a similar test had been of value in the diagnosis of doubtful cases.

There was then presented to the Medical Officers a number of charts indicating the relative standing of the Province in connection with a number of Communicable Diseases, especially Tuberculosis, and the progress in disease control being made—these charts having been prepared in the Department of the Public Health. Drs. R. E. Wodehouse, of the Canadian Tuberculosis Association, and L. A. Pequegnat, of the Social Hygiene Council, who were present at this portion of the session, contributed to the discussion taking place on these charts.

The evening meeting of the Association was an open meeting, being held in the Auditorium of the Bridgewater High School, his Worship Mayor James Brignall being in the Chair. The Women's Institute of the Town of Bridgewater had kindly consented that the meeting be held under their patronage. Unfortunately the weather conditions were such as most effectively to discourage a large attendance, but very great interest was shown by all present in the programme which had been prepared. After a number of moving pictures had been shown, the meeting was addressed by Drs. R. E. Wodehouse and L. A. Pequegnat, on aspects of the public health work carried on by the Associations with which they are connected.

The meeting of the Association which is to be held in the summer of 1926 will be held in Halifax on the day preceding that on which the opening meeting of the Nova Scotia Medical Society will be held.

Among the Resolutions presented to the Nova Scotia Medical Society, and passed by it, was one intended to strengthen the efforts of the Canadian Social Hygiene Council in preventing a further reduction of

the Federal grant for the control of Venereal Disease. The Nova Scotia Medical Society has here again placed itself on record as in favour of the work in which the Social Hygiene Council is interested, as well as of the programme under the direct supervision of the Federal Department of Health.

Editorial

EVERY DOCTOR A HEALTH OFFICER

In our next issue we hope to reprint from the current number of the *Long Island Medical Journal* an abstract of an address given by Dr. Geo. E. Vincent, President of the Rockefeller Foundation, before the Medical Society of the County of Kings. Dr. Vincent is already known to the health authorities of the Dominion, perhaps not so well known as he should be to the medical profession at large. He speaks with authority, and the content of his address is well worthy of study.

This Journal has repeatedly pointed out the many deficiencies which still exist in our health organization and has attempted to call attention from time to time to the many problems which cry out for solution: the problems of the apparently well, of the incipiently ill, of those who will become ill and a charge on their relatives and the community and perhaps die because of the limitations of our machinery and in spite of all we are trying to do to prevent such calamities.

The fact is that, while we have been crying out, rightly, for full-time health officials, on the whole we have forgotten that in the medical profession itself, we have a great body of men carefully educated in the basic sciences, and fully educated in the various phases of curative medicine who are *nearly* capable of filling roles as important agents in the field of preventive medicine. In other words, they could easily become health officers in so far as their own communities of patients are concerned.

That the practitioner of medicine has on the whole clung tenaciously to the idea that his chief function is to patch up people who are broken down is true. It is no less true that the conservative one in the profession will fight to the last ditch against any other conception. Indeed, one thinks with despair of the many, fortunately now almost entirely among the older men, whose horizon has always been obscured by the vision of the top-hat and gold-headed cane as the great emblems of professional rectitude. Too often, also, in days gone by they wore the symbols of pomposity, well-meaning ignorance and a professional intolerance, which were instrumental in preventing progress in the direction of really cutting down morbidity and mortality rates.

If the general attitude of organized medicine is in the direction of change, and undoubtedly it is changing, Dr. Vincent suggests that many modifications in medical practice and in preparation for practice will be necessary. This is a matter for careful discussion on the part of organized medicine itself and of the universities.

There is no intention here of duplicating Dr. Vincent's address in an editorial of commendation. Our readers are referred for further information to the address itself.

THE DOCTOR IN POLITICS

The doctor of yesterday is not the doctor of to-day, and, as ideals and standards are changing in other walks of life, so also are the ideals of medicine and the ambitions and work of the doctor. Perhaps one of the most notable of changes is in the general attitude of the successful doctor in politics.

Time was when the doctor in politics was pretty much like the ordinary lawyer or manufacturer or farmer in politics, too frequently a politician pure and simple, who took no thought of the opportunities which his professional training gave him, who used politics as a means to a more or less material and personal end, whose politics were certainly apart from his profession. True, some doctors have made a considerable success in political life in Canada and elsewhere. Notable examples of this may be found in the case of Clemenceau in France, Sir Leland Starr Jamieson in South Africa and Sir Charles Tupper in Canada; all of these men were protagonists of the old school, and their success meant the severing to a large extent of their medical affiliations.

But, with the advent of the doctor in the role of Minister of Health, a new day appears to be dawning. In Canada we have Dr. Henri Beland as Minister of Health in the Dominion Cabinet, Dr. W. R. Roberts in the New Brunswick Cabinet, Dr. Forbes Godfrey in the Ontario Cabinet, and Dr. J. M. Uhrich in the Saskatchewan Cabinet. To all of these the future should spell opportunity; their field is great; the possibilities before them for rendering real service to mankind and to the welfare of the Dominion are almost boundless.

Of particular interest in providing an example of a physician who has already accomplished much as a Cabinet Minister, in charge of a health portfolio, is the case of the Hon. Dr. Roberts in New Brunswick. Dr. Roberts has the distinction of being the first Minister of Health to be appointed in the British Empire, his appointment pre-dating that of Dr. Christopher Addison in the British Cabinet. It is well known that Dr. Roberts took up his portfolio at great personal sacrifice and only because he saw a public duty ahead. He believed that in the office of Minister of Health there would lie undreamt-of opportunities which could be grasped only through the creation of this office.

The result is well known throughout the health world. From being a backward province in health matters, through the activities of its aggressive Health Minister, New Brunswick has forged steadily ahead.

Dr. Roberts has waged a warfare for that most important of all ideals, the health of the people, continuously and consistently, and his success as well as his sincerity has earned for him the admiration of public spirited citizens in all parts of the Dominion. By his uniting efforts and his unique methods he has brought the discussion of health to the position which it deserves in the minds of the people. He has forced its recognition as a subject worthy of serious discussion when the people take counsel among themselves as to those things which should be carried out for the good of all, and in the legislature of New Brunswick measures for the conservation of health receive the discussion and thought which they deserve. THE PUBLIC HEALTH JOURNAL takes no part in politics, but gives honour where honour is due. All honour to Dr. Roberts.

The Hon. Dr. Godfrey in Ontario has been a Minister for a short time, but there is no doubt that he too will take advantage of the opportunity which lies before him of fighting on the floor of the Ontario legislature for all matters concerning health. Dr. Godfrey as a private member was outstanding in pressing the importance of such measures, so much so that he had already achieved a well-deserved reputation before going into office.

To all of our Canadian Ministers of Health the PUBLIC HEALTH JOURNAL extends the wish that success may attend their efforts in a great cause. To the extent that they depart from the old ideals of the political doctor and in the measure to which they absorb and preach the doctrines of their new duty will Canada progress. To them as men of scientific training and high ideals is given the duty of teaching our legislators and our people that no nation can be greater than the people who form it; and that our thoughts must be turned more and more to the task of building up a community in which the existence of the halt, the maimed and the blind will be but a memory. Under such leadership we may well develop a people whose physical, mental and moral make-up will grow finer with each succeeding year. Surely this end, achieved as the result of the conscious effort of the people themselves, must prove the modern interpretation of the virtue which exalteth a nation.

6